

Abstract

The present invention relates to a method and a device for cutting freeform surfaces.

In 5-axle cutting, a workpiece is milled by a tool, i.e., a milling cutter in such a way that a desired freeform surface is obtained. The tool is moved for cutting along at least one tool path, i.e., cutting path defined on the basis of interpolation points in relation to the workpiece.

According to this invention, a tool vector in the form of leading angles and setting angles is defined for each interpolation point on the tool path. For each interpolation point a normal vector is determined from the leading angles and the setting angles and also from a drive vector determined for each interpolation point. The normal vector in each interpolation point on the tool path is used for a 3D-radius correction for equalizing/compensating for deviations in dimensions of the milling cutter (Figure 1).